APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/010,801	01/22/98	HAMBURG	M	07844/235001

WM51/1031

EXAMINER
COLBERT, E

ART UNIT	PAPER NUMBER
2172	

ROGER S BOROVOY
FISH AND RICHARDSON
2200 SAND HILL ROAD
SUITE 100
MENLO PARK CA 94025

DATE MAILED: 10/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

☒ Responsive to communication(s) filed on *Jul 3, 2000* _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire ___one___ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-25 and 27-44* _____ is/are pending in the application.

   Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-25 and 27-44* _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

   ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

      ☐ received.

      ☐ received in Application No. (Series Code/Serial Number) _____ .

      ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   *Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Response to 03 July 2000 Amendment

1.   In Applicant's later amendment on 03 July 2000, the Examiner noted the amendment only

contained underlining format which was fully considered in the Office Action on 16 August 2000.

The Examiner is also including a copy of the afore mentioned Office Action. Therefore, the

statuatory period for response to that Office Action is not reset.

The afore mentioned Office Action is repeated here below.

Response to Amendment

2.   Claims 1-25 and 27-44 are presented for examination. Claim 26 was canceled in response

to the Office Action of 25 February 2000 entered as paper number 8.

3.   The prior Office Action is included by reference.

4.   Those applicable sections of Title 35 Of United States Code not present herein were

presented in an earlier Office Action.

5.   Applicants' response of 07 June 2000 to the Office Action has been entered as amendment

B, paper number 9.

6.   Applicants' amendment to the rejection of claim 1 under 35 U.S.C. 112, second

paragraph, as set forth in paper number 8, is hereby withdrawn.

7.   Applicants' rejection of claims 3, 4, 8, 37, and 38 under 35 U.S.C. 112, second paragraph,

as set forth in paper number 8, still remains rejected under 35 U.S.C. 112, second paragraph.

8. Applicants' objected claims 22 and 43 for informalities has been overcome by Applicants' amendment to claims 22 and 43, is hereby withdrawn.

9. In Applicants' Response, Applicants' argue: on page 3: a) "Nakajima does not disclose or suggest maintaining a history of the states of a document as the states change when operations are performed on the document;" on page 4: b) "Nakajima does not disclose a method of performing a redo or undo operation by installing as the current state of the document a state stored in the state history;" c) "Nakajima does not disclose a method of maintaining a first history of interesting operations global to the state of the application and Nakajima neither teaches nor suggests making any distinction as to how different kinds of operations are handled;" and on page 6: d) "Matheny does not provide the user an editing tool having the designated state as a document state operand. Nakajima in combination with Matheny does not teach or suggest providing the user the editing method recited in claim 22."

10. As to a), b), c), and d) above, in this rejection of claim 1 and others, for example, under Section 103 of Title 35 of the United States Code, the Examiner carefully drew up a correspondence between each of Applicants' claimed limitations, one or more referenced passages in Nakajima, Bristor, and Matheny, what is well known in the art, and what is obvious to one having ordinary skill in the art at the time the invention was made. The Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111   Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).<

In this instance, Nakajima does not explicitly teach maintaining a history of the states of a document as the states change when operations are performed on the document; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made and in view of Nakajima's teaching of storing a log of at least two user commands in a memory with the commands being undone and then redone (as taught in the summary of the invention section, column 1). The log being maintained in the memory is synonymous with Applicants' history of the states of the document change when operations (redo and undo) are performed on the document. As to b) above, Nakajima does teach a method for performing a redo and undo operation by storing a list of commands in a sequence as they are performed with the most recent executed user command which is synonymous to Applicants' redo and undo operation being installed as the current state stored in the state history (log) in column 1. This interpretation by the Examiner is reasonable and consistent with the Applicants' claim limitation. As to c) above, Nakajima does not explicitly teach a method of maintaining a first history of "interesting operations" and a second history of operations global to the state of the application is interpreted by the Examiner as being taught in column 2, lines 12-35 and figures 5b and 6b. Nakajima does not explicitly teach a distinction as to how the different operations are handled; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made and in

view of his teachings of a data processing system being responsive to user commands and the

effects of commands being performed in an undo/redo operation with the user commands stored

in a log (which is a history or record of the commands). The claim limitation "interesting

operation" as recited in claims 3, 4, 8, 37, and 38 is interpreted by the Examiner as any operation

being performed is considered interesting. The Applicants' can be their own lexicographer,

however, the terminology used must enable one having ordinary skill in the art at the time the

invention was made to be able to make or use the invention and the Applicants' must particularly

point out and distinctly claim the subject matter which the Applicants' regard as their invention.

As to d) above, Matheny does not explicitly teach providing the user with an editing tool or

editing method having designated the state as the document state operand; however, Matheny

does teach providing protocol for supporting most of the standard editing commands in column

11. Nakajima in combination with Matheny teaches the recited limitation of canceled claim 16

now incorporated into claim 22. The motivation to combine Nakajima, Matheny, and Bristor is

found in M.P.E.P. 2145 paragraph (c) and recited as follows: A suggestion /motivation need not

be expressly stated in one or all of the references used to show obviousness. *Cable Electric*

Products, Inc. V. Genmark, Inc., 770 F.2d 1015, 1025, 226 USPQ 881, 886 (Fed. Cir. 1985); *In*

re Sheckler, 438 F.2d 999, 1001, 168 USPQ 716, 717 (CCPA 1971). It is assumed that every

reference relies to some extent on the knowledge of persons skilled in the art to complement that

which is disclosed therein. Further, the skilled artisan is presumed to know something more about

the art than only what is disclosed in the applied references. In other words, the person having

ordinary skill in the art has a level of knowledge apart from the content of the references. *In re Bode*, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977); *In re Jacoby*, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962).

Applicants' arguments have been fully considered but they are not persuasive. For this reason, the rejections are maintained and repeated here below.

Claim Rejections - 35 USC § 112

12.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13.   Claims 3, 4, 8, 37, and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "interesting operation" in lines 7 and 10, page 20 and lines 16 and 21, page 21. Claims 4, 8, 37, and 38 have a similar problem.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 1-18, 22-25, and 37-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (US 5,659,747).

With respect to claims 1 and 37, "maintaining in a memory a state history of a document for storing document states"(**column 1, lines 26-34**) and "whenever an operation of a predetermined type has occurred, automatically capturing the state of the document as it exists after operation and adding the captured state to the state history" (**column 1, lines 35-53 and column 6, lines 43-45**).

With respect to claim 2, Nakajima did not teach "the memory comprises a disk file," but it would have been obvious to one having ordinary skill in the art of memory at the time the invention was made to have the memory comprise a disk file because when the computer is turned off the ROM (Read Only Memory) goes blank; any data in it must be copied to a disk or tape if it is to be saved.

With respect to claim 3, "the state history includes states of the document and the order in which the stored states were automatically added to the state history" (**column 2, lines 39-45**), "the state history is displayed to a user as a list of document states shown in their stored order" (**column 4, lines 15-37**), "an operation is classified as an interesting operation if it changes the state of the document" (**column 4, lines 38-58**), "a state is added to the state history only if the operation creating the state is classified as an interesting operation and not otherwise" (**column 4, lines 59-67 and column 5, lines 1-14**), "performing a step backward operation by installing as the current state of the document a state stored in the state history, all backward operations place the document in a state that occurred immediately after an interesting operation" (**column 1, lines 29-34, column 2, lines 9-14, and figures 5a and 5b**), and "performing a step forward operation

by installing as the current state of the document a state stored in the state history, all step

forward operations place the document in a state that occurred immediately after an interesting

operation" **(column 2, lines 15-20 and lines 29-35, and figures 6a and 8a)**. Nakajima did not

explicitly teach "performing a step forward operation," however, Nakajima's performing a redo

operation is synonymous to "performing a step forward operation."

With respect to claim 4, "the list of document states displayed to the user comprises a list

of items, each item representing a state of the document that existed after an interesting operation

and that can be recovered with a step backward operation in the application" **(column 4, lines 59-**

67 and column 5, lines 1-5 and lines 15-24) and "the list of document states displayed to the

user comprises a list of items, each item representing a state of the document that existed after an

interesting operation and that can be recovered directly by selecting the item" **(column 25, lines**

25-40). Nakajima did not explicitly teach a "step backward operation," however Nakajima's

performing an undo operation" is synonymous with a "step backward operation."

With respect to claim 5, "the application provides a tool operable under user control to

obtain source material from any state in the state history and apply it to a current state of the

document" **(column 4, line 1-9)**. Najkajima did not teach "the application is a digital graphics

program operable to create and revise images in digital form" and "the images are raster images,"

but it would have been obvious to one having ordinary skill in the art of digital graphics programs

at the time the invention was made to create and to revise the images in digital form as raster

images because the graphics program can decide what action to be taken with the image being

displayed on the visual display representing any kind of document such as a scanned picture in a

bitmapped format or any other type of document.

With respect to claim 6, "the application enables a user to select any item in the display list

of items and cause the application to create a new document having the document state

corresponding to the selected item" (column 6, lines 2-12). Nakajima did not explicitly teach

"creating a new document having the document state corresponding to the selected item," but it

would have been obvious to one having ordinary skill in the art of document creation at the time

the invention was made to have document state correspond to the selected item because the

operating system application program creates a document for each associated command that is

executed in the application program linking the command together in a sequential list (column 6,

lines 31-45).

With respect to claim 7, "each of the captured states in the state history maintains the state

data in essentially its original form whereby the captured state data is suitable for immediate use in

other operations" (column 3, lines 20-48).

With respect to claims 8 and 38, "maintaining a first history of interesting operations and a

second history of all operations requested by a user, the second history but not the first history

including operations global to the state of the application" (column 1, lines 29-34 and lines 39-

48).

With respect to claims 9 and 39, "receiving from the user a sequence of commands to

change the document" (column 3, lines 25-28), "changing the document state in response to each

command" (column 1, lines 39-48), "for each document state added to the state history, adding a

corresponding entry to a history list displayed to the user on a computer-controlled display device

operated as part of a graphical user interface" (column 5, lines 1-14), and "in response to a user

action stepping backward to an item in the history list, updating the document to have the

corresponding document state saved in the state history" (column 5, lines 15-24). Nakajima did

not teach "adding the changed document state to a state history maintained in a computer-

readable memory device each time the document state is changed," but it would have been

obvious to one having ordinary skill in the art of changing the state of a document at the time the

invention was made to have a state history maintained in a computer readable memory device

because when changes are made to a document the changes are stored in volatile memory and

must be saved to a more permanent memory such as magnetic tape to prevent loss in the event of

a software or hardware error causing the computer to freeze.

With respect to claim 10, Nakajima did not teach "the state history and the history list are

limited to storing a preset number of items and excess items are scrolled off the top of the list as

new items are added," but it would have been obvious to one having ordinary skill in the art of

limited storage for state histories and history list at the time the invention was made to have a

preset items and excess items scrolled off the top of the list when new items are added because

each action is stored sequentially in the history list and to undo an action, the last action stored is

scrolled off the list and the application takes whatever measures are required to undo an action.

With respect to claim 11, "the state history is stored in a region of memory and the oldest

document states in the state history are discarded when free space in the region runs low"

(column 1, lines 26-34).

With respect to claim 12, "the oldest document states are found and discarded by a

memory management process" **(column 4, lines 44-58).** Nakajima did not teach "a memory

management process," but it would have been obvious to one having ordinary skill in the art of

memory management at the time the invention was made to have a process because a computer

system can only maintain a limited amount of memory for data storage and the oldest data is

usually deleted (discarded).

With respect to claim 13, "a command to change the document that comes after a step

backward command to a selected item in the history list causes the items after the selected item to

be deleted from the history list and the corresponding document states to be deleted from the state

history" **(column 4, lines 59-67).**

With respect to claim 14, "a command to change the document that comes after a step

backward command to a selected item in the history list does not cause the items after the selected

item to be deleted from the history list and adds a new item to the end of the history list and a new

document state to the state history" **(column 4, lines 15-67).**

In regard to claim 15, "enabling a user interface gesture on the history list to create a new

document from a document state from the state history" **(column 5, lines 1-15).** Nakajima did

not teach "a user interface gesture," but it would have been obvious to a person of ordinary skill

in the art of user interface at the time the invention was made to have a gesture because the user

selects an icon and performs an operation on the list to create a document.

With respect to claims 16 and 40, "keeping a history list" (**column 3, lines 25-30**), "going

back to a previous state from the history list, being a state created after the previous state, as a

source of data for an operation" (**column 5, lines 15-24**), and "performing the operation with the

future data on the previous state" (**column 5, lines 47-65**).

With respect to claims 17 and 41, "keeping a history of document states created by a user"

(**column 1, lines 41-48**) and "enabling the user to step backward and forward through the

history and thereby to alter the state of the document to be any of the document states in the

history" (**column 2, lines 39-45, column 3, lines 56-67, and column 4, lines 1-7**). Nakajima did

not teach "enabling the user to discard any of the history," but it would have been obvious to one

having ordinary skill in the art of keeping a document history at the time the invention was made

to enable the user to discard any of the history because the history list of a document and the

commands performed should be updated frequently by the user.

With respect to claims 18 and 42, "keeping a history of document states created

automatically whenever a user command to the application changes the state of a document"

(**column 1, lines 12-22**) and "enabling the user to designate any one of the document states in

the history" (**column 2, lines 39-45**). Nakajima did not teach "enabling the user to discard any

user-selected set of the document states in the history and to install the designated state as the

current state of the document," but it would have been obvious to one having ordinary skill in the

art of document states at the time the invention was made to enable the user to discard any of the

history and to install a designated state as the current state because the history of a document

needs to be updated and any unneeded history relating to the document should be discarded

(deleted) by the user since the user knows the sequence of the commands performed.

With respect to claims 22 and 43, "identifying for the user on a display device a set of

states that the document has been in by operation of the application" (column 2, lines 52-53 and

column 3, lines 8-23) and "enabling the user to designate any arbitrary one of the identified

states" (column 3, lines 31-36). Nakajima did not disclose "identifying to the user on a display

device a set of states," and "providing the user an editing tool having the designated state as a

document state operand," but it would have been obvious to one having ordinary skill in the art of

displaying states at the time the invention was made to identify to the user the states on a display

device because the user will be able to see what commands have been entered and what

operations have been performed on the document and the user can use the editing tool to give

editing commands provided by the system such as cut, copy, paste, undo, and redo.

With respect to claim 23, Nakajima did not teach "displaying the document in a user

interface window the document being a digital image," but it would have been obvious to one

having ordinary skill in the art of displaying documents at the time the invention was made to

display the document in a user interface window because the user can perform operations on the

displayed document image by selecting the icons (pictures) by using a mouse.

With respect to claim 24, "displaying user-interface elements for applying filters to the digital image" **(column 3, lines 61-65)**. Nakajima did not teach "applying filters to a digital image," but it would have been obvious to one having ordinary skill in the art of applying filters at the time the invention was made to apply the filters to a digital image because many of the image processing functions are built into paint and photopaint programs and applied as filters to the image.

With respect to claim 25, "installing the designated state as the current state of the document in response to a user command" **(column 2, lines 39-45)**.

16.   Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Bristor (US 6,018,342).

With respect to claim 19, Nakajima did not teach "saving the history when the document is closed on a long-term storage medium, whereby the history may be restored when the document is later opened and across invocations of the application." Bristor taught this in **column 12, lines 3-13 and column 13, lines 24-28**. It would have been obvious to one having ordinary skill in the art of saving document histories at the time the invention was made to save the history on a long-term storage medium when the document is closed and to combine Nakajima's document history states with Bristor's saving the document history because the document history is stored in a history database (a computer storage medium) for later retrieval by a user.

With respect to claim 20, Nakajima did not teach "the saved history resides in the document with final document data." Bristor taught this in **column 14, lines 64-67 and column**

15, lines 1-8. It would have been obvious to one having ordinary skill in the art of saved histories at the time the invention was made to have the history reside with the final document data and to combine Nakajima's history list with Bristor's saved history residing in the document with the document data because the previously generated data is represented to the user and associated with the stored (saved) data.

With respect to claim 21, Nakajima did not teach "the saved history resides in a long-term data repository independent of the original document." Bristor taught this in **column 17, lines 44-67 and column 18, lines 1-3**. It would have been obvious to one having ordinary skill in the art of saved histories at the time the invention was made to have the history reside in a long-term data repository and to combine Nakajima's captured states with Bristor's saved history residing in a long-term data repository because the data which are designated by the user and could include a saved history.

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18.   Claims 27-36 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima in view of Matheny et al (US 5,583,982), hereafter Matheny.

With respect to claim 26, Nakajima did not teach "providing the user an editing tool

having the designated state as a document state operand." Matheny taught this in **column 13,**

lines 7-33. It would have been obvious to one having ordinary skill in the art of editing tools at

the time the invention was made to provide the user with an editing tool having a designated state

and to combine Nakajima's set of states with Matheny's editing tool because the user can use the

tool to give editing commands provided by the system such as cut, copy, paste, undo, and redo.

With respect to claim 27, Nakajima did not teach "providing the user an delete tool for

deleting the designated state from the set of states." Matheny disclosed this in **column 3, line 18**

and column 5, lines 37-40. It would have been obvious to one having ordinary skill in the art of

delete tools at the time the invention was made to provide the user with a delete tool having a

designated state and to combine Nakajima's identification of states with Matheny's delete tool for

deleting a designated state because by a mouse action the user can undo a command after the

command has been performed on a document.

With respect to claim 28, Nakajima did not teach "the set of states is identified by

displaying a scrollable list of elements each identifying one of the states in the set." Matheny

taught this in **column 23, lines 14-25.** It would have been obvious to one having ordinary skill in

the art of displaying a scrollable list of elements at the time the invention was made to have the list

of elements identify one of the states in the set and to combine Nakajima's identification for the

user on a display device a set of states with Matheny's set of states identifying a display of

scrollable list of elements because each menu contains a scrollable list of the menu items and the command reflects its current appearance when displayed to the user.

With respect to claim 29, Nakajima did not teach "the list of elements are ordered by the time the corresponding states were created." Matheny taught this in **column 23, lines 26-45**. It would have been obvious to one having ordinary skill in the art of lists of elements at the time the invention was made to have the list of elements ordered by the time the corresponding states are created and to combine Nakajima's display of user-interface elements with Matheny's list of elements because the steps carried out are in (1) order of creation command, (2) adding a menu item, and (3) marking the menu's appearance to correspond to the menu item.

With respect to claim 30, Nakajima did not teach "the designation and installation are performed in response to a single command. Matheny taught this in **column 23, lines 53-67 and column 24, lines 1-2**. It would have been obvious to one having ordinary skill in the art of commands at the time the invention was made to have the designation and installation performed in response to a single command and to combine Nakajima's installing the designated state as the current state with Matheny's designation and installation being performed in response to a single command because the command looks at whatever the system state it wants to and returns whether it is inactive based on whether a particular window is in front or a particular object is selected (column 23, lines 61-66).

With respect to claim 31, Nakajima did not teach "enabling the user to make a gesture on a user interface indicating a sequence of displayed state identifiers and responding to the gesture

by displaying the document in the states indicated as the gesture is made." Matheny taught this in

column 24, lines 40-49. It would have been obvious to one having ordinary skill in the art of

making a gesture on a user interface at the time the invention was made to have the gesture

responded to by displaying the document states and to combine Nakajima's designated state as

the current state with Matheny's user interface indicating a sequence of displayed state identifiers

because when a user performs operations an icon is selected and the presented document

identified by its present state.

With respect to claim 32, Nakajima did not teach "enabling the user to modify the

document state after the installing step" and "adding the document state resulting from the

modification to the set of states identified on the display device." Matheny taught this in **column**

8, lines 36-46. It would have been obvious to one having ordinary skill in the art of enabling a

user to modify the document at the time the invention was made to have an installing step and to

combine Nakajima's designated state being the current state with Matheny's enabling the user to

modify the document and adding the document state resulting from the modification because the

user creates a state for each command in the system and the document is displayed for the

modification of the document.

With respect to claim 33, Nakajima did not teach "the set of states is displayed in order of

creation of the states in the set." Matheny taught this in **column 3, lines 20-23 and column 23,**

lines 30-37. It would have been obvious to one having ordinary skill in the art of displaying the

set of states at the time the invention was made to have set of states displayed in order of creation

and to combine Nakajima's identifying a set of states with Matheny's display of the set of states in order of creation because the commands are added to the menu in order of creation of the menu item from a command and displayed to the user in that order.

With respect to claim 34, Nakajima nor Matheny taught "the document is a digital image," but it would have been obvious to one having ordinary skill in the art of documents at the time the invention was made to have the document as a digital image because the image being displayed can represent any kind of a document such as a scanned picture in a bitmapped format or any other type of document that may be represented on a computer screen.

With respect to claims 35 and 36, Nakajima did not teach "providing a step backward and a step forward command for the user to execute to navigate the set of states" and "providing a separate undo and redo command for the user to undo and redo commands entered by the user." Matheny taught this in **column 14, lines 42-54**. It would have been obvious to a one having ordinary skill in the art of stepping backward and stepping forward at the time the invention was made to have the user to execute to navigate the set of states and to combine Nakajima's set of states with Matheny's providing a separated undo and redo command entered by the user because the user often toggles between the two states of a document and makes a comparison of a result of the command.

With respect to claim 44, Nakajima nor Matheny did not explicitly teach providing the user a first undo command function that operates with reference to the first history and a second undo command function that operates with reference to the second history;" however, it would

have been obvious to one having ordinary skill in the art at the time the invention was made and in

view of Nakajima's and Matheny's teaching of first and second user undo commands (as taught in

the summary of the invention section **columns 1-2**).

Conclusion

19.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Peterson et al (5,801,687) taught a tool palette of graphical tools and a mechanism for

adding and deleting states.

Schacher (6,002,402) taught a file history and a menu list.

Selesky et al (5,890,181) taught a user "undo" and "redo" feature and an action history

stack.

20.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date

of this final action.

21.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ella Colbert whose telephone number is (703)308-7064. The

examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu, can be reached on (703)305-4393.

Any response to this action should be mailed to:

> Commissioner of Patents and Trademarks
> Washington, D.C. 20231

Or faxed to:

> (703)308-9051, (for formal communications intended for entry).

Or:

> (703)305-9731 (for informal or draft communications, please label

"PROPOSED" or "DRAFT").

> Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
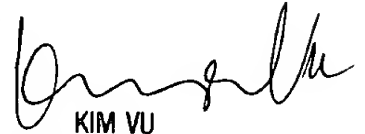> Drive, Arlington, Virginia., Sixth Floor (Receptionist).

Art Unit: 2172

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703)308-9600.

Colbert
August 10, 2000 (Previous Office Action)
October 25, 2000 (Response to Amendment 03 July 2000)

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700